



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/524,671	09/12/2005	Rolf Kotte	265380US6PCT	1530
22850	7590	03/11/2010	EXAMINER	
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, L.L.P. 1940 DUKE STREET ALEXANDRIA, VA 22314			BELL, WILLIAM P	
			ART UNIT	PAPER NUMBER
			1791	
			NOTIFICATION DATE	DELIVERY MODE
			03/11/2010	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com
oblonpat@oblon.com
jgardner@oblon.com

Office Action Summary	Application No. 10/524,671	Applicant(s) KOTTE ET AL.	
	Examiner WILLIAM P. BELL	Art Unit 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 November 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 17-19, 21-24, 26 and 28-35 is/are pending in the application.
- 4a) Of the above claim(s) 18, 24, 26 and 28-32 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 17, 19, 21-23 and 33-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 February 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>01/19/2010</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 17, 19, 21-23, and 33-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Legrand (International Patent Publication No. WO 01/98613, already of record) in view of Ichinohe (U.S. Patent No. 4,663,901, already of record), and further in view of Ash (U.S. Patent No. 5,123,535). Regarding claim 17, Legrand teaches a method for fabrication of a vehicle drop glass with a transparent pane (see abstract and pane 1 in Figure 1), on an extremity of which a support part is to be attached (see stirrups 7 and 8 in Figure 1), which cooperates with a drive and/or guide device for heightwise movement of the pane (see guides 9 and 10 in Figure 1), the method comprising orienting and setting the pane in a device (see page 5, lines 21-23 and Figure 3, wherein rollers 22-26 serve to orient pane 1 which has been placed in the depicted device), such that the pane is supported by at least three predetermined contact points (see Figure 3, wherein rollers 22-26 support the pane by contact), wherein the at least three predetermined contact points represent a reference plane that is independent of a curved structure of the pane between the at least three points (see Figure 3, wherein rollers 22-26 may be positioned relative to pane 1 regardless of any

Art Unit: 1791

curvature of the pane in the space between the rollers); depositing a curable plastic material on the pane in a region of an assembly with the support part (see page 9, line 35 through page 10, line 10, wherein the use of various adhesives for attaching the stirrups to the pane is taught, including reactive polyurethane); fashioning the curable plastic material in a fixed position in a space inside the device into a fashioned part that includes a reference face that is aligned in a defined manner in relation to the at least three predetermined contact points and that corresponds to a contact face of the support part such that, after the support part is assembled with the pane, the fashioned part defines a predetermined position of the support part in relation to the three predetermined contact points (see Figure 3, wherein stirrups 7 and 8 are positioned on and attached to pane 1 by the illustrated device in a predefined position relative to the position of the pane on the device; the adhesive becomes an integral fashioned part of the assembly upon curing; as shown in Figure 9, the adhesive fills the spaces between pane 1 and the U-shaped structure of the stirrups; Legrand teaches that the pane and stirrup are positioned relative to the desired configuration of the finished vehicle drop glass (see abstract); the faces of the fashioned part (i.e., the cured adhesive) correspond to the recited reference face and are defined in relation to the contact points because they are determined by the orientation of the stirrup relative to the pane and its support/positioning mechanism; these reference faces correspond to contact faces defined as the faces of the fashioned part (i.e., the cured adhesive) which contact the pane itself); and curing the plastic material (see page 10, line 7, wherein a slow reacting polyurethane adhesive is taught, the reaction being a curing operation). Legrand does

Art Unit: 1791

not teach depositing the curable plastic material on the pane with the aid of at least one tool. Ichinohe teaches a method of adhesively attaching a support bracket to a pane of glass using an "anti-flow member" tool to prevent flow of the adhesive from at least one end of the slot in the support bracket (see column 3, lines 30-33 and Figure 2). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method taught by Legrand with the use of the anti-flow member tool taught by Ichinohe for the benefit of controlling the flow of the adhesive on the pane (see Ichinohe, column 3, lines 30-33). Legrand does not teach that the support part is made of at least one additional part which is attached to the fashioned part in the predetermined position by the reference face fashioned on the fashioned part. Ichinohe teaches a support bracket which comprises a series of ribs (see column 3, lines 6-13 and ribs 14 and 15 in Figure 2), which constitute additional parts of the support bracket. Once fixed to the glass pane by the adhesive, the ribs would be attached to the reference face of the fashioned part, as defined above, in the predetermined position. It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method taught by Legrand with the ribs on the support bracket taught by Ichinohe for the benefit of maintaining close contact between the bracket and the glass pane (see Ichinohe, column 3, lines 9-11). Legrand, as modified by Ichinohe, teaches orienting and setting the pane in the device such that the pane lies on at least three predetermined contact points, but those points are generally on the edges of the panes rather than on a main face of the pane. Ash teaches a method of molding a part along an edge of glass pane (see column 1, lines 15-24) wherein the position of the

Art Unit: 1791

pane must be carefully maintained (see column 2, lines 20-27). Ash teaches that this mechanism comprises a plurality of vacuum heads or other holding means and stops (see column 4, lines 28-31; see vacuum heads 27 and stops 26 in Figures 1 and 4). It would have been obvious to one ordinary skill in the art at the time of the invention to have modified the method taught by Legrand, as modified by Ichinohe, with the separate stops and vacuum holding heads taught by Ash because Ash teaches that this configuration is effective at holding a frangible glass sheet in position on a stationary mold base (see column 4, lines 28-31).

Regarding claim 19, Legrand teaches a method wherein the fashioned part is shaped while bonding to the pane (since the stirrups are being bonded to the pane via the adhesive, the surfaces of the stirrups in contact with the adhesive inherently serve to shape at least part of the adhesive).

Regarding claim 21, Legrand teaches a method wherein fashioning the curable plastic material includes using the support part including the additional part as a portion of a mold to shape the fashioned part by pressing the support part onto a mass of plastic constituting the fashioned part (since the stirrups are being bonded to the pane via the adhesive, the surfaces of the stirrups in contact with the adhesive inherently serve to shape at least part of the adhesive; since the surfaces shape the adhesive, they can be reasonably interpreted as a mold for the adhesive).

Regarding claim 22, Legrand does not teach first attaching the stirrups and then filling the space between the stirrups and the pane with adhesive. However, one of skill in the art readily appreciates that there are only three possible ways of assembling the

Art Unit: 1791

stirrups to the pane: (1) applying the adhesive to the pane and then attaching the stirrups; (2) applying the adhesive to the stirrups and then attaching them to the pane (Ichinohe teaches this method; see column 1, lines 56-61); and (3) placing the stirrups on the pane and injecting adhesive in the gap between the stirrups and the pane. It would have been obvious to one of ordinary skill in the art at the time of the invention to have considered any of these methods of attaching the stirrups, as all are well known alternative. One would be motivated to try each method to determine which one would result in the most efficient use of the adhesive.

Regarding claim 23, Legrand teaches a method wherein the support part is assembled to the fashioned part by bonding with an adhesive deposited in addition between the fashioned part and the support part (see page 10, lines 2-10, wherein Legrand teaches providing an additional "instant" adhesive to assist in the assembly of the stirrups to the pane).

Regarding claim 33, Legrand does not teach a method wherein separate contact points and stops are provided to position the pane. Ash teaches a method of positioning a glass pane using a mechanism which comprises a plurality of vacuum heads or other holding means and stops (see column 4, lines 28-31; see vacuum heads 27 and stops 26 in Figures 1 and 4). It would have been obvious to one ordinary skill in the art at the time of the invention to have modified the method taught by Legrand, as modified by Ichinohe, with the separate stops and vacuum holding heads taught by Ash because Ash teaches that this configuration is effective at holding a frangible glass sheet in position on a stationary mold base (see column 4, lines 28-31).

Regarding claim 34, Legrand teaches a method for fabrication of a vehicle drop glass with a transparent pane (see abstract and pane 1 in Figure 1), on an extremity of which a support part is to be attached (see stirrups 7 and 8 in Figure 1), which cooperates with a drive and/or guide device for heightwise movement of the pane (see guides 9 and 10 in Figure 1), the method comprising orienting and setting the pane in a device (see page 5, lines 21-23 and Figure 3, wherein rollers 22-26 serve to orient pane 1 which has been placed in the depicted device), such that the pane is supported by at least three predetermined contact points (see Figure 3, wherein rollers 22-26 support the pane by contact), wherein the at least three predetermined contact points represent a reference plane that is independent of a curved structure of the pane between the at least three points (see Figure 3, wherein rollers 22-26 may be positioned relative to pane 1 regardless of any curvature of the pane in the space between the rollers); depositing a curable plastic material on the pane in a region of an assembly with the support part (see page 9, line 35 through page 10, line 10, wherein the use of various adhesives for attaching the stirrups to the pane is taught, including reactive polyurethane); fashioning the curable plastic material in a fixed position in a space inside the device into a fashioned part that includes a reference face that is aligned in a defined manner in relation to the at least three predetermined contact points and that corresponds to a contact face of the support part such that, after the support part is assembled with the pane, the fashioned part defines a predetermined position of the support part in relation to the three predetermined contact points (see Figure 3, wherein stirrups 7 and 8 are positioned on and attached to pane 1 by the illustrated device in a

Art Unit: 1791

predefined position relative to the position of the pane on the device; the adhesive becomes an integral fashioned part of the assembly upon curing; as shown in Figure 9, the adhesive fills the spaces between pane 1 and the U-shaped structure of the stirrups; Legrand teaches that the pane and stirrup are positioned relative to the desired configuration of the finished vehicle drop glass (see abstract); the faces of the fashioned part (i.e., the cured adhesive) correspond to the recited reference face and are defined in relation to the contact points because they are determined by the orientation of the stirrup relative to the pane and its support/positioning mechanism; these reference faces correspond to contact faces defined as the faces of the fashioned part (i.e., the cured adhesive) which contact the pane itself; and curing the plastic material (see page 10, line 7, wherein a slow reacting polyurethane adhesive is taught, the reaction being a curing operation). Legrand does not teach depositing the curable plastic material on the pane with the aid of at least one tool. Ichinohe teaches a method of adhesively attaching a support bracket to a pane of glass using an "anti-flow member" tool to prevent flow of the adhesive from at least one end of the slot in the support bracket (see column 3, lines 30-33 and Figure 2). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method taught by Legrand with the use of the anti-flow member tool taught by Ichinohe for the benefit of controlling the flow of the adhesive on the pane (see Ichinohe, column 3, lines 30-33). Legrand does not teach that the support part is made of at least one additional part which is attached to the fashioned part in the predetermined position by the reference face fashioned on the fashioned part. Ichinohe teaches a support bracket which comprises a

Art Unit: 1791

series of ribs (see column 3, lines 6-13 and ribs 14 and 15 in Figure 2), which constitute additional parts of the support bracket. Once fixed to the glass pane by the adhesive, the ribs would be attached to the reference face of the fashioned part, as defined above, in the predetermined position. It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method taught by Legrand with the ribs on the support bracket taught by Ichinohe for the benefit of maintaining close contact between the bracket and the glass pane (see Ichinohe, column 3, lines 9-11). Legrand, as modified by Ichinohe, teaches orienting and setting the pane in the device such that the pane lies on at least three predetermined contact points, but those points are generally on the edges of the panes rather than on a main face of the pane. Ash teaches a method of molding a part along an edge of glass pane (see column 1, lines 15-24) wherein the position of the pane must be carefully maintained (see column 2, lines 20-27). Ash teaches that this mechanism comprises a plurality of vacuum heads or other holding means and stops (see column 4, lines 28-31; see vacuum heads 27 and stops 26 in Figures 1 and 4). It would have been obvious to one ordinary skill in the art at the time of the invention to have modified the method taught by Legrand, as modified by Ichinohe, with the separate stops and vacuum holding heads taught by Ash because Ash teaches that this configuration is effective at holding a frangible glass sheet in position on a stationary mold base (see column 4, lines 28-31). Legrand teaches supporting the pane along its edges (see Figure 3), thereby allowing for installation of the stirrups onto the pane independent of variations in the shape of the glass (see abstract). Thus, one of skill in the art would similarly position the vacuum

Art Unit: 1791

heads taught by Ash along the edges. Since the edges of the pane contact the seals in the door in which the pane is installed, the support/contact points would then correspond to points of contact of the pane with the vehicle door.

Regarding claim 35, Legrand does not teach a method wherein separate contact points and stops are provided to position the pane. Ash teaches a method of positioning a glass pane using a mechanism which comprises a plurality of vacuum heads or other holding means and stops (see column 4, lines 28-31; see vacuum heads 27 and stops 26 in Figures 1 and 4). It would have been obvious to one ordinary skill in the art at the time of the invention to have modified the method taught by Legrand, as modified by Ichinohe, with the separate stops and vacuum holding heads taught by Ash because Ash teaches that this configuration is effective at holding a frangible glass sheet in position on a stationary mold base (see column 4, lines 28-31).

Response to Arguments

3. Applicant's arguments with respect to claims 17, 19, 21-23, and 33-35 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 1791

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to WILLIAM P. BELL whose telephone number is (571)270-7067. The examiner can normally be reached on Monday - Thursday, 8:00 am - 5:30 pm; Alternating Fridays, 8:00 am - 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on 571-272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1791

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/WILLIAM P BELL/
Examiner, Art Unit 1791

/Richard Crispino/
Supervisory Patent Examiner, Art Unit 1791